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P.O. Box 251
Jamestown, RI 02825

30 April 2002

Pamela F. Lafreniere
Attorney and Counselor at Law
888 Purchase Street, Suite 414
New Bedford, MA 02740

Dear Attorney Lafreniere:

Re: Case: U.S.DOC/NOAA vs. F/V Settler

Pursuant to your request, I have reviewed the following documents related to the
aforementioned case:

1. Reports by Clifford Goudey dated 12 August 2001 and
23 August 2001
2. Various Investigation Reports by the U.S.C.G.
3. U.S.C.G. position comparison – CGC Spencer/F/V Settler
4. Report by Reidar's Manufacturing, Inc. regarding the fishing gear used by the
F/V Settler on 16 October 1997
5. Report by Carl Setterstrom dated 28 Jan 2002

I also want to call your attention to the fact that I was previously contacted about this
case by Joel LaBissonniere, a NOAA attorney. After reviewing many documents and
discussing the matter with him by telephone, we concluded that my testimony could not
support his case.

With regard to my review of the facts in this case, I find the following:

1. It is my opinion that it was impossible for the F/V Settler to have traveled the
5+ knot speeds reported by the Coast Guard during the period 2152- 2208 on
16 October 1997 while towing a monkfish trawl net. I have formed this
conclusion for two reasons. First, is the fact that the catch (monkfish, lobster,
and crabs) described in the report of Petty Officer Richard Chicoine confirms
that the gear was functioning properly on the bottom. Second, I have
estimated the overall drag of the fishing gear at towing speed of 2, 3, 4, and 5
knots by calculating the drag of the net at those speeds and multiplying that
number by two as the overall drag of the gear is typically two times the drag of
the net. I used the following equations to estimate the net drag.

$$D = (1/2)(\rho)(V^2)(Cd)(A)$$

Where: D = net drag in kgf,

ρ = mass density of water at 104 kgf sec² m⁻⁴,

V = towing speed in m/sec,

Cd = drag coefficient of 0.5,

A = twine surface area of 89 m².

The results of these calculations are as follows:

V(kts)	V(m/sec)	Dnet (kgf)	Dgear (kgf)
2.0	1.0	2336.	4672
3.0	1.5	5256.	10512
4.0	2.0	9344	18688
5.0	2.5	14600	29200

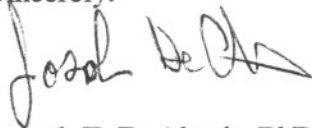
The towing power of the F/V Settler is approximately 12,000 kgf or 12 mt or 26,000 lbs. based on a conversion of 100 HP is equal to 1.2 MT towing power, or 1 HP is equal to 30 pounds of bollard pull. Assuming minimal boat resistance, it appears that the F/V Settler would not be able to exceed a towing speed about 3.25 kts.

- Another conflicting point of evidence is in the report of Petty Officer Richard Chicoine. He indicates that when he asked the Master of the F/V Settler about the trawl, the Master stated that it was his first trawl with a start time of 2130 and then Master pointed to the plotter way point position of 40-01.28N 70-11.46W. This position is outside the Restricted Area, and it is be unlikely that the vessel could move from the reported start position at 2130 to the position plotted by the CGC Spencer at 2140 inside the Restricted Area. Regrettably, when Petty Officer Chicoine noted the trawl start position on the plotter of the F/V Settler, had he also noted the trawl track line on the plotter and described it in his report, there would now be no question as to the actual track followed by the F/V Settler. Interestingly, when I plot the reported trawl start position at 2130, and the reported position at 2208, the F/V Settler appears to have traveled due South, and the straight line vessel speed is 2.0 knots. Note that this is within the range of towing speeds typically used with monkfish trawl gear.

Therefore, I conclude that U.S. Coast Guard evidence is inconsistent and incomplete, and therefore does not indicate that the F/V Settler was within the Restricted Area.

If you have any questions regarding my analysis or this letter, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph DeAlteris". The signature is fluid and cursive, with the first name "Joseph" written in a larger, more prominent script than the last name "DeAlteris".

Joseph T. DeAlteris, PhD.
President, DeAlteris Associates Inc.